

## IX.3.4B-RPD1S SUBROUTINE RPD1S

### Description

Subroutine RPD1S reads observed data for one or more daily data types for a single station for a specified period.

### Calling Sequence

CALL RPD1S (ISTAID, IDTYPE, NTPES, IDATYP, IFDAY, ILDAY, LTYPE, IRTYPE, MTPES, LDATA, DATA, LDFILL, IDELT, NVPDT, MSNG, ISTAT)

### Argument List

<u>Argument</u>	<u>Input/ Output</u>	<u>Type</u>	<u>Dimension</u>	<u>Description</u>
ISTAID	Input	A8	1	Station identifier
		or I*4	1	Station number
IDTYPE	Input	I*4	1	Station identifier/number indicator: 0 = ISTAID is identifier 1 = ISTAID is number
NTPES	Input	I*4	1	Number of data types requested
IDATYP	Input	A4	NTPES	Data type codes requested <u>1</u> /
IFDAY	Both	I*4	1	Julian day of first day of data requested/returned <u>3</u> /
ILDAY	Both	I*4	1	Julian day of last day of data requested/returned <u>3</u> /
LTYPE	Input	I*4	1	Length of IRTYPE
IRTYPE	Output	A*4	LTYPE	Data type codes returned <u>2</u> /
MTPES	Output	I*4	1	Number of data types returned
LDATA	Input	I*4	1	Length of DATA (I*2 words)
DATA	Output	I*2	LDATA	Array containing data from IFDAY to ILDAY for each data type returned (data for each data type that has more than one value per day will be organized as shown in note 3 for subroutine RPDDL) <u>4</u> /

<u>Argument</u>	<u>Input/ Output</u>	<u>Type</u>	<u>Dimension</u>	<u>Description</u>
LDFILL	Output	I*4	1	Number of I*2 words filled in DATA
IDELT	Output	I*4	LTYPE	Data time interval for each data type returned
NVPDT	Output	I*4	LTYPE	Number of data values per time interval for each data type returned
MSNG	Output	I*2	LTYPE	Value on file for missing data for each data type returned
ISTAT	Output	I*4	1	Status code: 0 = okay 1 = array IRTYPE too small - LTYPE values filled 2 = array DATA too small - LDATA values filled 3 = ISTAID not found 4 = one or more data types not found - data types which are found are returned 5 = no values on file within the period IFDAY to ILDAY requested 6 = IFDAY or ILDAY reset 7 = file read/write error

Notes:

- 1/ Any of the allowable observed data types for data stored on a daily basis by station can be requested. Allowable types are all those given in listed in subroutine RPDDL Y Note 1 except for MDR6 and PPSR which are not stored by station and any future types. Also types PPVR and TAVR are allowed. Also if the first data type requested is 'ALL ' then all the observed data types given under note 1 of subroutine RPDDL Y that are defined for the station are returned. 'ALL ' is only valid as the first data type requested. If 'ALL ' is the first data type requested then all others are ignored.
- 2/ Precipitation and instantaneous temperature can be requested for a data time interval that is a multiple of the time interval in which the data are stored on the PPDB. Precipitation values will be accumulated. For instantaneous temperature data only values that correspond to the time interval requested will be returned. Precipitation and instantaneous temperature cannot be returned for intervals which are not a multiple of the time interval in which the data are stored on the PPDB.
- 3/ Julian day specified is the day corresponding to the end of the 24

hour period in Z time for which data are stored.

4/ PP24 and PPSR data are stored in encoded form as described in subroutine RPDDLY Note 3.